

REMARKS

Claims 11-20 were pending. Claims 12 and 13 were cancelled. Claim 11 was amended. Claims 21-25 were added. Therefore, claims 11 and 14-25 will be pending upon entry of the instant amendment.

No new matter has been added. Support for the amendment to claim 11 can be found in the originally filed specification, for example, at least at page 26, lines 20-21.

Support for new claims 21-25 can be found in the originally filed specification, for example, at least at page 26, line 20 through page 27, line 28.

Oath/Declaration

Co-inventor, Farkas-Himsley is deceased. Pursuant to the Examiner's request, papers updating the status of the inventors which were filed in related cases are submitted herewith. These papers include (1) a copy of the will of Hannah Farkas-Himsley naming Leorah Kroyanker and Ruth Geva as her heirs; (2) a copy of a certificate of translation of the will; and (3) a declaration and power of attorney signed by all Applicants, including Ruth Geva and Leorah Kroyanker.

Applicants inadvertently failed to claim priority under 35 U.S.C. § 119 in the Declaration filed herewith. Applicants' claim to priority under 35 U.S.C. § 119 has been previously claimed in the original Declaration. A certified copy of the priority papers have been previously provided and acknowledged by the Examiner. Accordingly, Applicants are claiming the benefit of priority to Canadian application no. 2,116,179, filed on February 22, 1994.

Rejection of Claims 11-12 and 14-20 under 35 U.S.C. § 112, first paragraph

Claims 11-12 and 14-20 are rejected under 35 U.S.C. § 112, first paragraph, because, according to the Examiner, "the specification, while being enabling for cancer cells that are Gb₃ positive, does not reasonably provide enablement for the killing of any cancer cell." Applicants respectfully disagree. However, in the interest of expediting prosecution, Applicants have amended the claims such that the claims that are currently pending are directed to methods of killing cells that are Gb₃ positive. Therefore, Applicants respectfully request that this rejection of claims 11-12 and 14-20 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Rejection of Claims 1-18 under 35 U.S.C. § 102(b)

Claims 1-18 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Mangeney *et al.* (*Cancer Research* 53, 5314-19, Nov. 1993).

Claims 1-10, 12 and 13 have been cancelled, thus rendering their rejection moot.

Claims 11 and 14-18 are directed to a method for killing Gb₃ positive cancer cells from a patient *in vitro*, by obtaining the cells from the patient, and contacting the cells with a verotoxin.

Mangeney *et al.* describes the effects of verotoxin on various cell lines. According to the Examiner, Mangeney *et al.* "teaches the apoptosis of cancer cells of claims 1-14 and 18 following administration of verotoxin." Mangeney *et al.* use cells obtained from a cell line, and not from a patient. Mangeney *et al.* fails to teach or suggest obtaining cells from a patient and treating the cells obtained from the patient *in vitro* with verotoxin, as claimed by Applicants.

Therefore, Applicants request that this rejection of claims 11 and 14-18 under 35 U.S.C. § 102(b) be withdrawn.

Rejection of Claims 1-18 under 35 U.S.C. § 103(a)

Claims 1-18 are rejected under 35 U.S.C. § 103 (a) as being anticipated by Mangeney *et al.* According to the Examiner, Mangeney *et al.* "teaches the apoptosis of cancer cells of claims 1-14 and 18 following administration of verotoxin."

As described above, claims 1-10, 12, and 13 have been cancelled, thus rendering their rejection moot. Claims 11 and 14-18 are directed to a method for killing Gb₃ positive cancer cells from a patient *in vitro*, by obtaining the cells from the patient, and contacting the cells with a verotoxin. Mangeney *et al.* describes treating cell lines with verotoxin to induce apoptosis.

Applicants assert that one of ordinary skill in the art would not have had a reasonable expectation of success in obtaining the claimed invention based on the cited reference. Specifically, Mangeney *et al.* fails to teach or suggest obtaining cells from a patient and treating the cells obtained from the patient *in vitro* with verotoxin, as claimed by Applicants. Without such teaching, one of ordinary skill in the art could not reasonably expect to obtain the claimed invention.

Thus, the Mangeney *et al.* reference fails to teach or suggest the claimed invention. Therefore, claims 11 and 14-18 are non-obvious in view of Mangeney *et al.* and reconsideration and withdrawal of this rejection under 35 U.S.C. § 103 (a) is requested.

***Rejection of Claims 11-20 under Judicially Created Doctrine of Obviousness-Type
Double Patenting***

Claims 11-20 were rejected under the judicially created doctrine of obviousness type double patenting over claims 1-9 of U.S. Patent No. 6,228,370 and over claims 1-12 of U.S. Patent No. 5,968,894. The Office Action indicates that timely filed terminal disclaimers in compliance with 37 C.F.R. § 1.312 (c) may be used to overcome a provisional rejection based on a non-statutory double patenting ground provided the conflicting application is shown to be commonly owned with this application. Applicants will address the double patenting issue upon a finding of subject matter in the instant application that is allowable but for the double patenting rejections.

SUMMARY

Cancellation of and/or amendments to the claims should in no way be construed as an acquiescence to any of the Examiner's objections and/or rejections. The cancellation of the claims is being made solely to expedite prosecution of the above-identified application. Applicants reserve the option to further prosecute the same or similar claims in the present or another patent application. The amendments made to the claims are not related to any issues of patentability.

In view of the above remarks and amendments, it is believed that this application is in condition for allowance. If a telephone conversation with Applicant's Attorney would expedite prosecution of the above-identified application, the Examiner is urged to call Giulio A. DeConti, Jr., Esq. at (617) 227-7400.

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Respectfully Submitted,
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VERSION OF CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

11. [Amended] A method for killing cancer cells from a patient, comprising obtaining said cells from said patient, contacting said cells with a verotoxin *in vitro*, such that said cells are killed, wherein said cells are Gb₃ positive.

21. [New] A method for killing cancer cells from a patient, comprising obtaining said cells from said patient, contacting said cells with a verotoxin, such that said cells are killed, wherein said cells are Gb₃ positive and multidrug resistant.

22. [New] The method of claim 21, wherein said cells are contacted with said verotoxin *in vitro*.

23. [New] A method for killing Gb₃ positive cells from a breast, ovarian, brain, or skin tumor in a patient, comprising obtaining said cells from said patient, contacting said cells with a verotoxin, such that said cells are killed.

24. [New] The method of claim 23, wherein said cells are contacted with said verotoxin *in vitro*.

25. [New] The method of claim 23, wherein said cells are multidrug resistant.